REMARKS

In response to the Office Action mailed February 3, 2009, Applicant respectfully requests reconsideration. Claims 1-20 were previously pending in this application. By this amendment, claims 1, 7, 8 and 11 have been amended. As a result, claims 1-13 and 15-20 are pending for examination with claims 1, 7 and 8 being independent. No new matter has been added.

Interview Summary

Applicant's attorneys appreciate the courtesies extended by Examiner Petranek in agreeing to review proposed claim amendments. Applicant's attorneys returned each of Mr. Petranek's phone messages but unfortunately were not able to reach Mr. Petranek. In any event, Mr. Petranek's detailed comments concerning the claims are appreciated and have been taken into account in the present response.

Rejections under 35 U.S.C. §112

The Office Action rejected claims 1-20 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. In particular, the Office Action indicated that claims 1, 7 and 8 recite an allegedly indefinite clause "substantially simultaneous with storing." Without acceding to the appropriateness of the rejection, Applicant has amended claims 1, 7 and 8 to remove this clause.

Accordingly, withdrawal of the rejection claims 1-20 under 35 U.S.C. §112 is respectfully requested.

Rejections Under 35 U.S.C. §103 based on Yamashita and Trauben

The Office Action rejected claims 8 and 20 (including independent claim 8) under 35 U.S.C. §103(a) as being allegedly unpatentable over Yamashita, U.S. Patent No. 6,467,083 ("Yamashita"), in view of Trauben, U.S. Patent No. 5,594,864 ("Trauben"). Applicant respectfully disagrees.

Claim 8, as amended, recites:

A method for monitoring a microprocessor executing a sequence of instructions by means of a device integrated to a microprocessor chip, the method comprising:

on each execution of an instruction from the sequence of instructions, generating a digital message of a type corresponding to a type of the executed instruction;

storing each generated digital message in a buffer memory;

simultaneously with storing in the buffer memory, at a first storage time, a first digital message of a first type corresponding to an instruction type associated with a first output terminal from a plurality of output terminals connected to an external analysis tool, providing the first storage time to the external analysis tool by modifying a state of the first output terminal; and

simultaneously with storing in the buffer memory, at a second storage time, a second digital message of a second type corresponding to an instruction type associated with a second output terminal from the plurality of output terminals, providing the second storage time to the external analysis tool by modifying the state of the second output terminal so that the external analysis tool determines a time elapsed between storing at the first storage time of the first digital message and storing at the second storage time of the second digital message.

(Emphasis added).

Yamashita and Trauben do not teach or suggest all of the limitations of claim 8. In particular, none of the cited references teaches or suggests "simultaneously with storing in the buffer memory, at a first storage time, a first digital message of a first type corresponding to an instruction type associated with a first output terminal from a plurality of output terminals connected to an external analysis tool, providing the first storage time to the external analysis tool by modifying a state of the first output terminal; and simultaneously with storing in the buffer memory, at a second storage time, a second digital message of a second type corresponding to an instruction type associated with a second output terminal from the plurality of output terminals, providing the second storage time to the external analysis tool by modifying the state of the second output terminal so that the external analysis tool determines a time elapsed between storing at the first storage time of the first digital message and storing at the second storage time of the second digital message," as recited in claim 8.

The Office Action concedes that Yamashita fails to teach *modifying a state of an output terminal* associated with an instruction type from the sequence of instructions substantially simultaneously with storing in the buffer memory, at a storage time, *a digital message of a type corresponding to the instruction type*, wherein the output terminal associated with the instruction type is from a plurality of output terminals connected to an external analysis tool, with each

output terminal from the plurality of output terminals being associated with an instruction type from the sequence of instructions. Claim 8 has been amended as shown above.

Trauben does not cure the deficiency of Yamashita. Indeed, as discussed in the Office Action, Trauben states that to monitor the first order behavior of processor 10, PIPE signals 51 provide *cycle by cycle observation* possible for key internal states of the target processor (Trauben, Fig. 5; col. 8, lines 28-30) (emphasis added). Thus, Trauben does not teach or suggest that "the external analysis tool determines a time elapsed between storing at the first storage time of the first digital message and storing at the second storage time of the second digital message," as recited in claim 8.

In view of the above, claim 8 patentably distinguishes over Yamashita and Trauben, either alone or in combination.

Claims 9 and 20 depend from claim 8 and are allowable for at least the same reasons.

Accordingly, withdrawal of the rejection of claims 8, 9 and 20 is respectfully requested.

Rejections Under 35 U.S.C. §103 based on Yamashita, Trauben and Edwards

Office Action rejected claims 1, 3, 5-7, 11-14 and 16-19 (including independent claims 1 and 7) under 35 U.S.C. §103(a) as being allegedly unpatentable over Yamashita and Trauben, in view of Edwards et al., U.S. Patent No. 6,918,065 ("Edwards").

Each of claims 1 and 7 has been amended to recite, inter alia, "simultaneously with storing in the buffer memory, at a storage time, of a digital message of a type from the plurality of types, the type corresponding to the instruction type associated with an output terminal from the plurality of output terminals, the storage time is provided to the external analysis tool by modifying a state of the output terminal." On page 14, the Office Action states that the Examiner agrees that "an amendment stating that a given message is stored and outputted via an output terminal simultaneously would overcome the rejection." Applicant respectfully notes that claims 1 and 7 each recite that when a digital message is stored in the buffer memory at a certain storage time, this storage time is simultaneously provided to the external analysis tool. Thus, Applicant believes that amendments to claims 1 and 7 essentially reflect the Examiner's suggestion and thus overcome the rejection. Indeed, while not "a given message" itself is stored and "outputted via an output terminal simultaneously," but rather **a storage time** indicating a time of storing the message **is provided simultaneously with storing** the message to the

external analysis tool by modifying a state of the at least one output terminal, none of the cited reference teaches or suggests this limitation.

In view of the above, independent claims 1 and 7 patentably distinguish over Yamashita, Trauben, and Edwards, either alone or in combination.

Claims 2-6, 18 and 19 depend from claim 1 and are allowable for at least the same reasons. Claims 10-13 and 15-17 depend from claim 7 and are allowable for at least the same reasons.

Accordingly, withdrawal of the rejection of claims 1-7, 10-13, and 15-19 is respectfully requested.
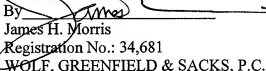
CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 23/2825 under Docket No. S1022.81223US00 from which the undersigned is authorized to draw.

Dated: May 1, 2009   Respectfully submitted,

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